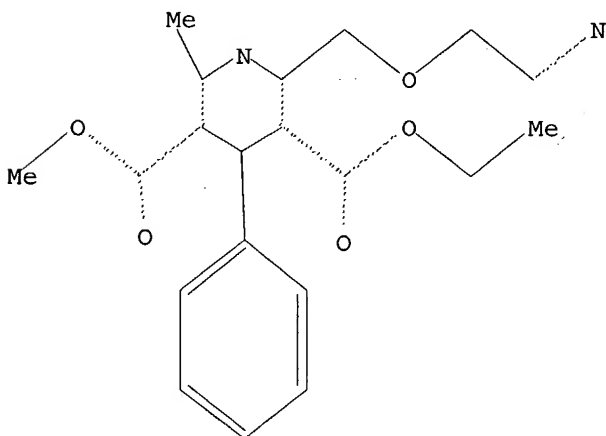


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FILE COVERS 1907 - 21 Sep 2004 VOL 141 ISS 13
FILE LAST UPDATED: 20 Sep 2004 (20040920/ED)

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L2      622 SEA FILE=REGISTRY SSS FUL L1
L5      3 SEA FILE=CAPLUS L2 AND PYROGLUTAM?
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ACCESSION NUMBER: 2004:157497 CAPLUS

DOCUMENT NUMBER: 140:199208

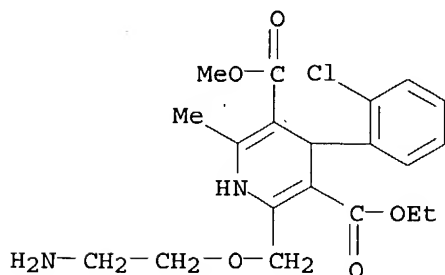
TITLE: Preparation of amlodipine **pyroglutamic** acid salts with improved stability and solubility.

INVENTOR(S): Youn, Yong Sik; Cho, Seong Hwan; Park, Choong Sil; Kim, Yun Cheul; Lim, Dong Kwon; Jung, Sung Hak; Lee, Sung Hak; Kang, Hyun Suk; Park, Kyung Mi; Jung, Yun Taek; Kim, Young Hoon; Yeon, Kyu Jeong; Chae, Myeong Yun; Jin, Hae Tak; Suh, Hea Ran; Lee, Kwang Hyeg; Lee, Hyuk Koo

10/642,754

PATENT ASSIGNEE(S): CJ Corporation, S. Korea
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1391453	A1	20040225	EP 2003-18653	20030820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004158075	A1	20040812	US 2003-642754	20030819
WO 2004018426	A1	20040304	WO 2003-KR1677	20030821
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004131483	A2	20040430	JP 2003-297765	20030821
PRIORITY APPLN. INFO.:			KR 2002-49422	A 20020821
AB	A pyroglutamic acid salt of amlodipine is claimed. Thus, amlodipine in EtOAc was treated with (S)- pyroglutamic acid at 25° followed by stirring for 1 h to give 95.3% amlodipine (S)- pyroglutamate . The latter showed improved stability on storage relative to the besylate, tosylate, and hydrochloride salts.			
IT	663180-17-4P 663180-18-5P 663180-19-6P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amlodipine pyroglutamic acid salts with improved stability and solubility)			
RN	663180-17-4 CAPLUS			
CN	L-Proline, 5-oxo-, compd. with 3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1) (9CI) (CA INDEX NAME)			
CM	1			
CRN	88150-42-9			
CMF	C20 H25 Cl N2 O5			



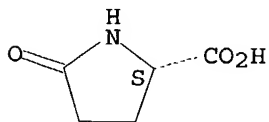
10/642,754

CM 2

CRN 98-79-3

CMF C5 H7 N O3

Absolute stereochemistry. Rotation (-).



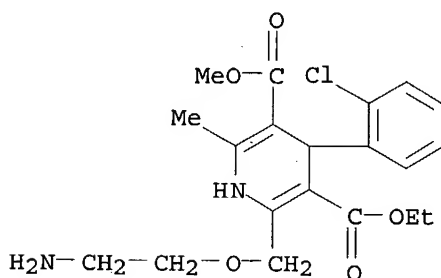
RN 663180-18-5 CAPLUS

CN D-Proline, 5-oxo-, compd. with 3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9

CMF C20 H25 Cl N2 O5

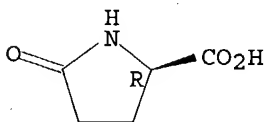


CM 2

CRN 4042-36-8

CMF C5 H7 N O3

Absolute stereochemistry. Rotation (+).



RN 663180-19-6 CAPLUS

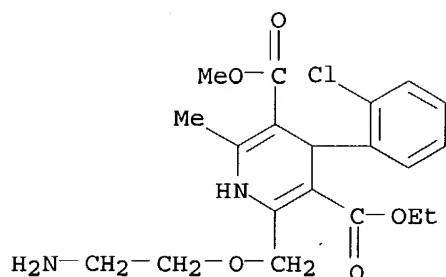
CN Proline, 5-oxo-, compd. with 3-ethyl 5-methyl 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylate (1:1)
(9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9

CMF C20 H25 Cl N2 O5

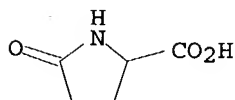
10/642,754



CM 2

CRN 149-87-1

CMF C5 H7 N O3



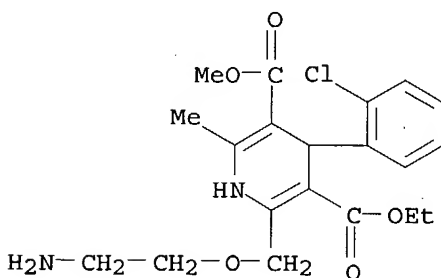
IT 88150-42-9, Amlodipine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of amlodipine **pyroglutamic** acid salts with improved stability and solubility)

RN 88150-42-9 CAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:41231 CAPLUS

DOCUMENT NUMBER: 140:111429

TITLE: Preparation of substituted heterocyclic derivatives useful as antidiabetic and antiobesity agents

INVENTOR(S): Cheng, Peter T. W.; Chen, Sean; Devasthale, Pratik; Ding, Charles Z.; Herpin, Timothy F.; Wu, Shung; Zhang, Hao; Wang, Wei; Ye, Xiang-Yang

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 543 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

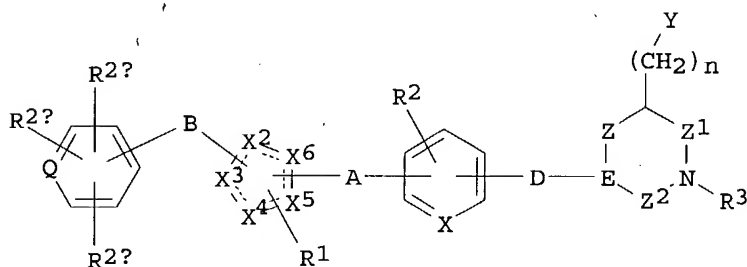
LANGUAGE: English

10/642,754

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004004665	A2	20040115	WO 2003-US22149	20030702
WO 2004004665	A3	20040325		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004063700	A1	20040401	US 2003-616365	20030708
PRIORITY APPLN. INFO.:			US 2002-394508P	P 20020709
OTHER SOURCE(S):		MARPAT 140:111429		
GI				



I

AB The title compds. (I) [Z1 = (CH2)q, CO; Z2 = (CH2)p, CO; D = CH, CO, (CH2)m (where m = 0-3; p = 1, 2; q = 0-2); n = 0-2; Q = C, N; A = (CH2)x (where x = 1-5); A = (CH2)x1 (where x1 = 1-5) with an alkenyl bond or an alkynyl bond embedded anywhere in the chain; or A = -(CH2)x2-O-(CH2)x3- (where X2, X3 = 0 to 5, provided that at least one of x2 and x3 is other than 0); B = a bond or (CH2)x4 (where x4 = 1-5); X = CH, N; X2-X6 = C, N, O, or S and at least one of X2-X6 is C; R1 = H, alkyl; R2 = H, alkyl, alkoxy, halogen, (un)substituted amino; R2a, R2b, R2c = H, alkyl, alkoxy, halogen, (un)substituted amino, cyano; R3 = H, alkyl, arylalkyl, aryloxy, carbonyl, alkyloxy, carbonyl, alkynyloxy, carbonyl, alkenyloxy, carbonyl, aryl, carbonyl, aryl, heteroaryl, cycloheteroalkyl, etc.; E = CH, N; Z = (CH2)x5 (where x5 is 0, i.e. a single or a double bond, 1, 2), or Z is (CH2)x6 (where x6 = 2-5), where (CH2)x6 includes an alkenyl (C:C) bond embedded within the chain or Z = -(CH2)x7-O-(CH2)x8- (where x7, x8 = 0-4); (CH2)x to (CH2)x8, (CH2)m, (CH2)n, (CH2)p and (CH2)q may be optionally substituted; Y = CO2R4 (where R4 = H, alkyl, or a prodrug ester), or Y = a C-linked 1-tetrazole, a phosphinic acid of the structure P(O)(OR4a)R5 [where R4a = H, a prodrug ester; R5 = alkyl or aryl, or a phosphonic acid of the structure P(O)(OR4a)2]] including all stereoisomers, prodrug esters, and pharmaceutically acceptable salts thereof are prepared These compds., e.g. cis-1-ethoxycarbonyl-4-[3-[2-(2-phenyl-5-methyloxazol-4-yl)ethoxy]phenyl]pyrrolidin-3-ylacetic acid and cis-1-(6-trifluoromethylpyrimidin-2-yl)-4-[3-[2-(2-phenyl-5-methyloxazol-4-yl)ethoxy]phenyl]pyrrolidine-3-carboxylic acid, modulate serum levels of

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blood glucose, triglyceride, insulin, and nonesterified fatty acid (NEFA) levels, and thus are particularly useful in the treatment of diabetes and obesity, especially Type 2 diabetes, as well as hyperglycemia,

hyperinsulinemia,

hyperlipidemia, obesity, atherosclerosis, and related diseases employing such substituted acid derivs. alone or in combination with another antidiabetic agent and/or a hypolipidemic agent and/ or other therapeutic agents. Disclosed is a method for treating diabetes, especially Type 2 diabetes, and related diseases such as insulin resistance, hyperglycemia, hyperinsulinemia, elevated blood levels of fatty acids or glycerol, hyperlipidemia, obesity, hypertriglyceridemia, inflammation, Syndrome X, diabetic complications, dysmetabolic syndrome, atherosclerosis, and related diseases, which comprises administering to a patient in need of treatment a therapeutically effective amount of the compound I. Also disclosed is a method for treating early malignant lesions (such as ductal carcinoma in situ of the breast and lobular carcinoma in situ of the breast), premalignant lesions including fibroadenoma of the breast and prostatic intraepithelial neoplasia (PIN), liposarcomas and various other epithelial tumors (including breast, prostate, colon, ovarian, gastric and lung), irritable bowel syndrome, Crohn's disease, gastric ulceritis, and osteoporosis and proliferative diseases such as psoriasis, which comprises administering to a patient in need of treatment a therapeutically effective amount of the compound I.

IT 111470-99-6, Amlodipine besylate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy; preparation of substituted heterocyclic derivs. as antidiabetic and antiobesity agents)

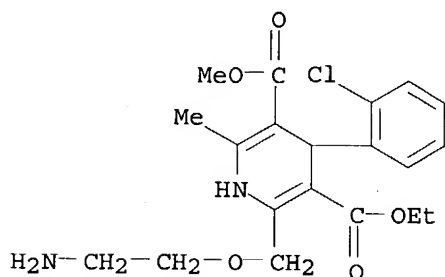
RN 111470-99-6 CAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester, monobenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 88150-42-9

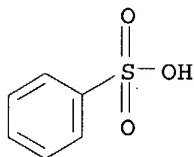
CMF C20 H25 Cl N2 O5



CM 2

CRN 98-11-3

CMF C6 H6 O3 S



L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:535071 CAPLUS

DOCUMENT NUMBER: 139:286210

TITLE: Topological virtual screening: A way to find new anticonvulsant drugs from chemical diversity

AUTHOR(S): Bruno-Blanch, L.; Galvez, J.; Garcia-Domenech, R.

CORPORATE SOURCE: Faculty of Exact Sciences, Biological Sciences Department, Medicinal Chemistry Laboratory, National University of La Plata, La Plata, B1900AVV, Argent.

SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(16), 2749-2754

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A topol. virtual screening (tvs) test is presented, which is capable of identifying new drug leaders with anticonvulsant activity. Mol. structures of both anticonvulsant-active and non active compds., extracted from the Merck Index database, were represented using topol. indexes. By means of the application of a linear discriminant anal. to both sets of structures, a topol. anticonvulsant model (tam) was obtained, which defines a connectivity function. On the basis of this model, 41 new structures with anticonvulsant activity have been identified by a topol. virtual screening.

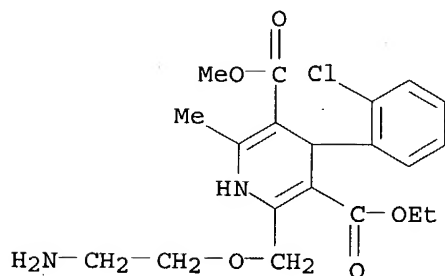
IT 88150-42-9, Amlodipine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(topol. virtual screening to find new anticonvulsant drugs from chemical diversity)

RN 88150-42-9 CAPLUS

CN 3,5-Pyridinedicarboxylic acid, 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-, 3-ethyl 5-methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

50

THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT